

**MULTICASTING OPTICAL SWITCH FABRIC AND METHOD OF
DETECTION BASED ON NOVEL HETERODYNE RECEIVER**

ABSTRACT OF THE DISCLOSURE

5 The inventors propose herein a switch fabric architecture that allows
broadcasting and fast channel access in the ns-range. In various embodiments
of the present invention, 10Gb/s receiver modules are based on a novel
heterodyne receiver and detection technique, which is tolerant to moderate
wavelength drifts of a local oscillator. A gain clipped electrical amplifier is used
10 in the novel receiver as a rectifier for bandpass signal recovery.